

TYPE-R SUBWOOFER APPLICATION GUIDE
GUIDE D’ APPLICATION

SWR-1521D

15 Inch Subwoofer for Sealed or Vented Enclosure (2 Ω) +(2 Ω)
Haut-parleur de sous-graves de 15 pouces (38 cm)
pour boîtier étanche (2 Ω) + (2 Ω)

SWR-1541D

15 Inch Subwoofer for Sealed or Vented Enclosure (4 Ω) +(4 Ω)
Haut-parleur de sous-graves de 15 pouces (38 cm)
pour boîtier étanche (4 Ω) + (4 Ω)

SWR-1221D

12 Inch Subwoofer for Sealed or Vented Enclosure (2 Ω) +(2 Ω)
Haut-parleur de sous-graves de 12 pouces (30 cm)
pour boîtier étanche (2 Ω) + (2 Ω)

SWR-1241D

12 Inch Subwoofer for Sealed or Vented Enclosure (4 Ω) +(4 Ω)
Haut-parleur de sous-graves de 12 pouces (30 cm)
pour boîtier étanche (4 Ω) + (4 Ω)

SWR-1021D

10 Inch Subwoofer for Sealed or Vented Enclosure (2 Ω) +(2 Ω)
Haut-parleur de sous-graves de 10 pouces (25 cm)
pour boîtier étanche (2 Ω) + (2 Ω)

SWR-1041D

10 Inch Subwoofer for Sealed or Vented Enclosure (4 Ω) +(4 Ω)
Haut-parleur de sous-graves de 10 pouces (25 cm)
pour boîtier étanche (4 Ω) + (4 Ω)

● SPECIFICATIONS

Model	SWR-1521D	SWR-1541D	SWR-1221D	SWR-1241D	SWR-1021D	SWR-1041D
Size	15"	15"	12"	12"	10"	10"
Impedance	2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω
Power Handling (RMS/Peak)	500W/1500W	500W/1500W	300W/1000W	300W/1000W	300W/1000W	300W/1000W
Frequency Response	Fs~1kHz	Fs~1kHz	Fs~1kHz	Fs~1kHz	Fs~1kHz	Fs~1kHz
Sensitivity*	89dB	89dB	87dB	87dB	85dB	85dB
D.C. Coil Resistance (Re)	1.8 Ω + 1.8Ω	4.0 Ω + 4.0Ω	1.8 Ω + 1.8Ω	3.6 Ω + 3.6Ω	1.8 Ω + 1.8Ω	3.6 Ω + 3.6Ω
Inductance (Le) 1kHz/20kHz	3.72mH/1.15mH	6.20mH/1.86mH	2.41mH/0.84mH	3.85mH/1.34mH	2.67mH/0.88mH	3.92mH/1.39mH
Free Air Resonance (Fs)	23Hz	24Hz	27Hz	28Hz	29Hz	30Hz
Equivalent Stiffness (Vas)	98L	98L	58L	58L	29L	29L
Qms/Qes/Qts	9.84/0.40/0.38	9.68/0.50/0.48	8.68/0.40/0.38	8.31/0.45/0.43	8.93/0.40/0.38	8.76/0.43/0.41
X max / X peak	16.5mm/33mm	14.5mm/29mm	13.35mm/26.7mm	13.87mm/27.74mm	13.35mm/26.7mm	13.87mm/27.74mm
Mechanical Excursion (P-P)	68mm	68mm	55mm	55mm	55mm	55mm
Gap/Coil Height (Hag/Hvc)	15mm/48mm	15mm/44mm	10mm/36.7mm	10mm/37.74mm	10mm/36.7mm	10mm/37.74mm
Cone Area (Sd)	754.77 cm^2	754.77 cm^2	467.59 cm^2	467.59 cm^2	320.47 cm^2	320.47 cm^2
Diaphragm Material	Kevlar Reinforced Pulp	Kevlar Reinforced Pulp	Kevlar Reinforced Pulp	Kevlar Reinforced Pulp	Kevlar Reinforced Pulp	Kevlar Reinforced Pulp
Spider Material	Nomex	Nomex	Nomex	Nomex	Nomex	Nomex
Magnet Weight	129.6oz	129.6oz	89.4oz	89.4oz	64oz	64oz
Voice Coil Diameter	65mm	65mm	50mm	50mm	50mm	50mm
Displacement (front mount)**	0.249 ft^3	0.249 ft^3	0.128 ft^3	0.128 ft^3	0.092 ft^3	0.092 ft^3
Displacement (rear mount)	0.322 ft^3	0.322 ft^3	0.163 ft^3	0.163 ft^3	0.115 ft^3	0.115 ft^3
Added Volume (reverse mount)**	0.162 ft^3	0.162 ft^3	0.073 ft^3	0.073 ft^3	0.047 ft^3	0.047 ft^3
Recommended Sealed Box Volume	1.3-2.5 ft^3	1.3-2.5 ft^3	0.7~1.0 f^3	0.7~1.0 f^3	0.5~0.8 f^3	0.5~0.8 f^3

* This commonly misunderstood specification should not be used as a reference for subwoofer output capability.
** Based upon 3/4" (~20mm) baffle thickness, with opening cut to gasket inner diameter

Notes: Thiel-Small parameters were measured and averaged after break-in.
Various measurement techniques may produce different but equally valid results.
All specifications are subject to change without notice

● SPECIFICATIONS

Model	SWR-1521D	SWR-1541D	SWR-1221D	SWR-1241D	SWR-1021D	SWR-1041D
Dimensions	15"	15"	12"	12"	10"	10"
Impedance	2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω
Puissance (RMS/Peak)	500W/1500W	500W/1500W	300W/1000W	300W/1000W	300W/1000W	300W/1000W
Réponse en fréquence	Fs~1kHz	Fs~1kHz	Fs~1kHz	Fs~1kHz	Fs~1kHz	Fs~1kHz
Sensibilité	89dB	89dB	87dB	87dB	85dB	85dB
Résistance en continu (Re)	1.8 Ω + 1.8Ω	4.0 Ω + 4.0Ω	1.8 Ω + 1.8Ω	3.6 Ω + 3.6Ω	1.8 Ω + 1.8Ω	3.6 Ω + 3.6Ω
Inductance (Le) 1kHz/20kHz	3.72mH/1.15mH	6.20mH/1.86mH	2.41mH/0.84mH	3.85mH/1.34mH	2.67mH/0.88mH	3.92mH/1.39mH
Fréquence de résonnance (Fs)	23Hz	24Hz	27Hz	28Hz	29Hz	30Hz
Raideur equivalente (Vas)	98L	98L	58L	58L	29L	29L
Qms/Qes/Qts	9.84/0.40/0.38	9.68/0.50/0.48	8.68/0.40/0.38	8.31/0.45/0.43	8.93/0.40/0.38	8.76/0.43/0.41
X max / X crête	16.5mm/33mm	14.5mm/29mm	13.35mm/26.7mm	13.87mm/27.74mm	13.35mm/26.7mm	13.87mm/27.74mm
Excursion mécanique (P-P)	68mm	68mm	55mm	55mm	55mm	55mm
Largeur Entrefer/Bobime (Hag/Hvc)	15mm/48mm	15mm/44mm	10mm/36.7mm	10mm/37.74mm	10mm/36.7mm	10mm/37.74mm
Surface de cône (Sd)	754.77 cm^2	754.77 cm^2	467.59 cm^2	467.59 cm^2	320.47 cm^2	320.47 cm^2
Mambrane	Kevlar renforcé	Kevlar renforcé	Kevlar renforcé	Kevlar renforcé	Kevlar renforcé	Kevlar renforcé
Suspension	Nomex	Nomex	Nomex	Nomex	Nomex	Nomex
Poids de l'aimant	129.6oz	129.6oz	89.4oz	89.4oz	64oz	64oz
Diamètre de bobine	65mm	65mm	50mm	50mm	50mm	50mm
Displacement (en avant)	0.249 ft^3	0.249 ft^3	0.128 ft^3	0.128 ft^3	0.092 ft^3	0.092 ft^3
Displacement (en arrière)	0.322 ft^3	0.322 ft^3	0.163 ft^3	0.163 ft^3	0.115 ft^3	0.115 ft^3
Volume en plus (en renvèrse)	0.162 ft^3	0.162 ft^3	0.073 ft^3	0.073 ft^3	0.047 ft^3	0.047 ft^3
Volume de charge recommandé	1.3-2.5 ft^3	1.3-2.5 ft^3	0.7~1.0 f^3	0.7~1.0 f^3	0.5~0.8 f^3	0.5~0.8 f^3

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DUAL 4Ω TYPE-R APPLICATION DIAGRAMS

SWR-1541 D/SWR-1241 D/
SWR-1041 D

Example1 One Amplifier and One Subwoofer

8Ω

Example 2 One Amplifier and One Subwoofer

2Ω

Example 3 Two Amplifiers and One Subwoofer

4Ω

4Ω

Example 4 One Amplifier and Two Subwoofers

4Ω

Example 5 One Amplifier and Three Subwoofers

2.6Ω

Example 6 One Amplifier and Four Subwoofers

2Ω

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DUAL 2Ω TYPE-R APPLICATION DIAGRAMS

SWR-1521 D/SWR-1221 D/
SWR-1021 D

Example1 One Amplifier and One Subwoofer

4Ω

Example 2 Two Amplifiers and One Subwoofer

2Ω

2Ω

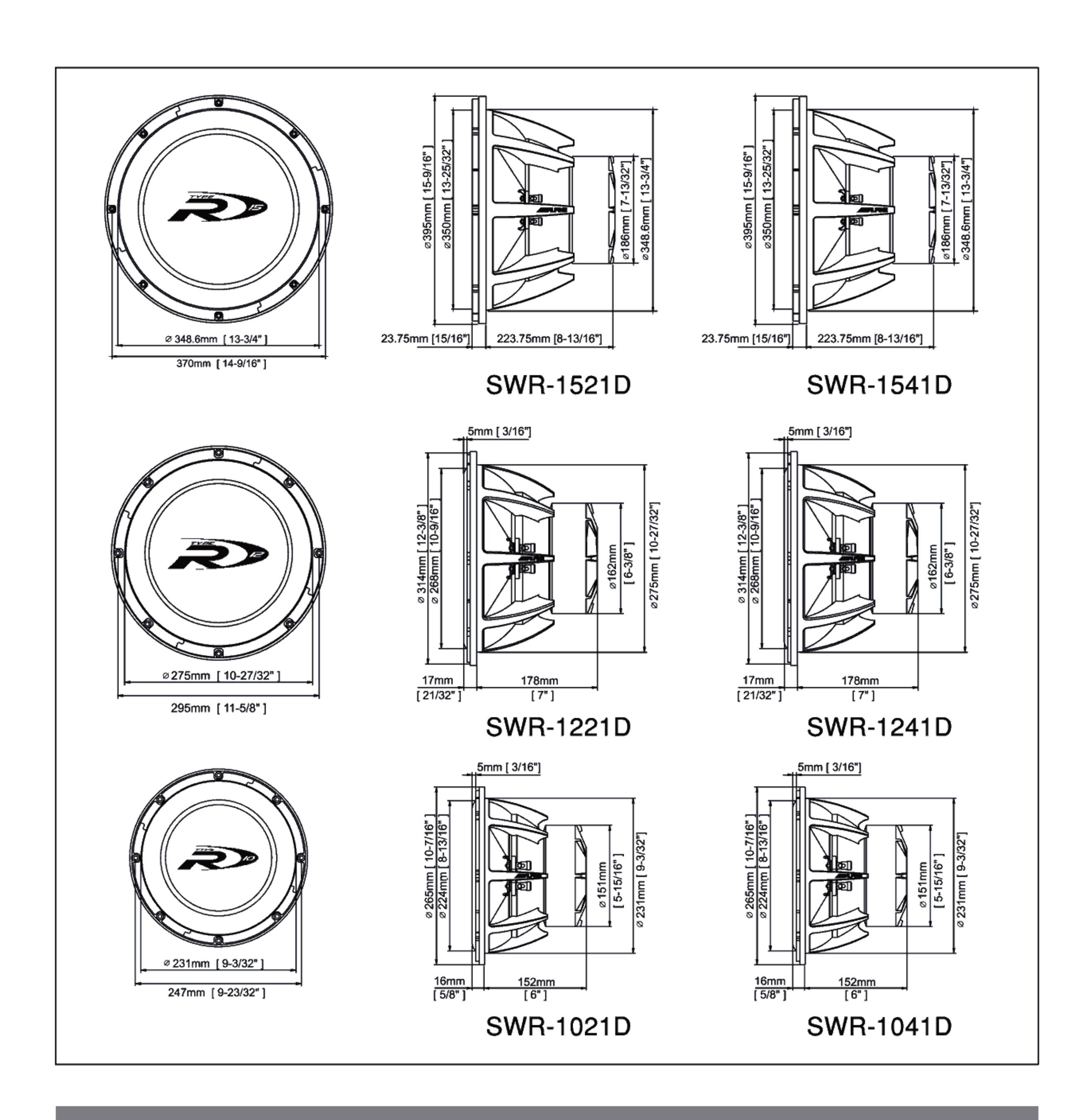
Example 3 One Amplifier and Two Subwoofers

2Ω

Example 4 Eight Amplifiers and Four Subwoofers-Competition Diagram

2Ω 2Ω 2Ω 2Ω

2Ω 2Ω 2Ω 2Ω



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